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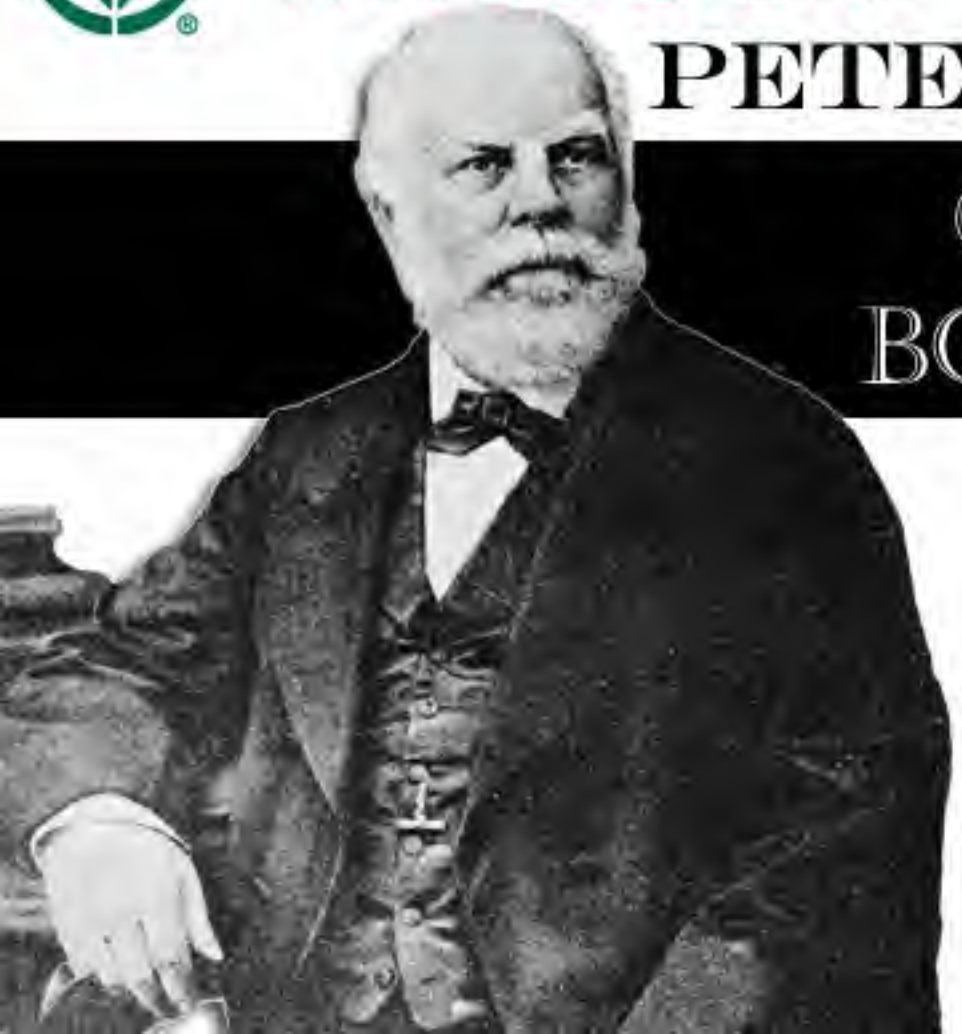
George Engelmann Botanical Notebooks



Pagination Note:
Since many of the items lack a specific page number, the page number displayed online refers to the sequentially created number each item was given upon cataloging the materials.

L'Illustration horticole, Journal spécial des serres
et des jardins par Ch Lemaire, Gand.
Vol 9. livr. 11. Nov. 1862 pag. 95-99.

p. 95 De l'identité générique du Cereus gigantens Engl.
p. 96 Lemaire confines Cereus to three forms, which have étamines
fasciculées - décombantes, et dont le premier rang seul
est soudé avec le tube, tout autour et dans une grande
partie de sa longueur."
ib. Echinocereus has the filaments "insérées gradiellement et libres"
p. 97. It is evidently a Pilocereus, which is to be
Pilocereus Lagelmanni. Hob
98. "The spines are not uniform, as Engelm says of the Lepidocereus
but "nettement difformes", like those of an Echinocactus.
"Le sommet de la tige est -- tomenteux (laineux,
sans doute, comme les Pilocereus!)

2090

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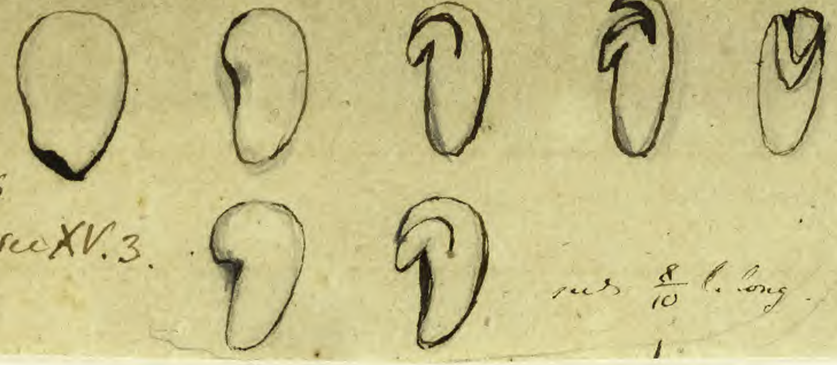
Sem. Cact. III

C. gigantea Engl.

vid pag. 86

1. Cereus "Pitahaya" "California Emory 1846



see XV. 3.

C. gigantea Thurber 1852

seed smooth shining
no albumen
cotyl. incumbent, one much smaller than the other
seed obovate, obliquely truncate, smooth, shining.
7/10 line long.

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March 1856

3. Cer. gigantea
Thurber
Gila River
see ~~XII~~. / III. /

see XII. / 1

2092

Seed 0.8 – 0.9 long, obovate-oblong, rounded obliquely, smooth, slightly incurved, hilum basilar narrowly oblong. –

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Flora of the Upper Missouri country

Dr. F. V. Hayden ##. 185...

Flora of ~~Western~~ Texas

Geogr. P. 1

Ferd. Lindheimer 18...

Flora of Pastina & Egypt

Hon Geo. P. Marsh 1851

Marsh 600
Lindheimer 5000
Hayden 3000
Wislizen 200
Fendler 40

Flora Palaestina Aegyptiaque

2093

Hab.

Hon Geo. P. Marsh coll. 1851

Flora Nebraskana

Hab:

Dr F. V. Hayden coll. 1853-4

Flora Texana

Hab.

Ferd. Lindheimer coll. 1848

Flora Neo-Mexicana & Mexicana sept.

Hab.

Dr A. Wislizenus coll 1846-47

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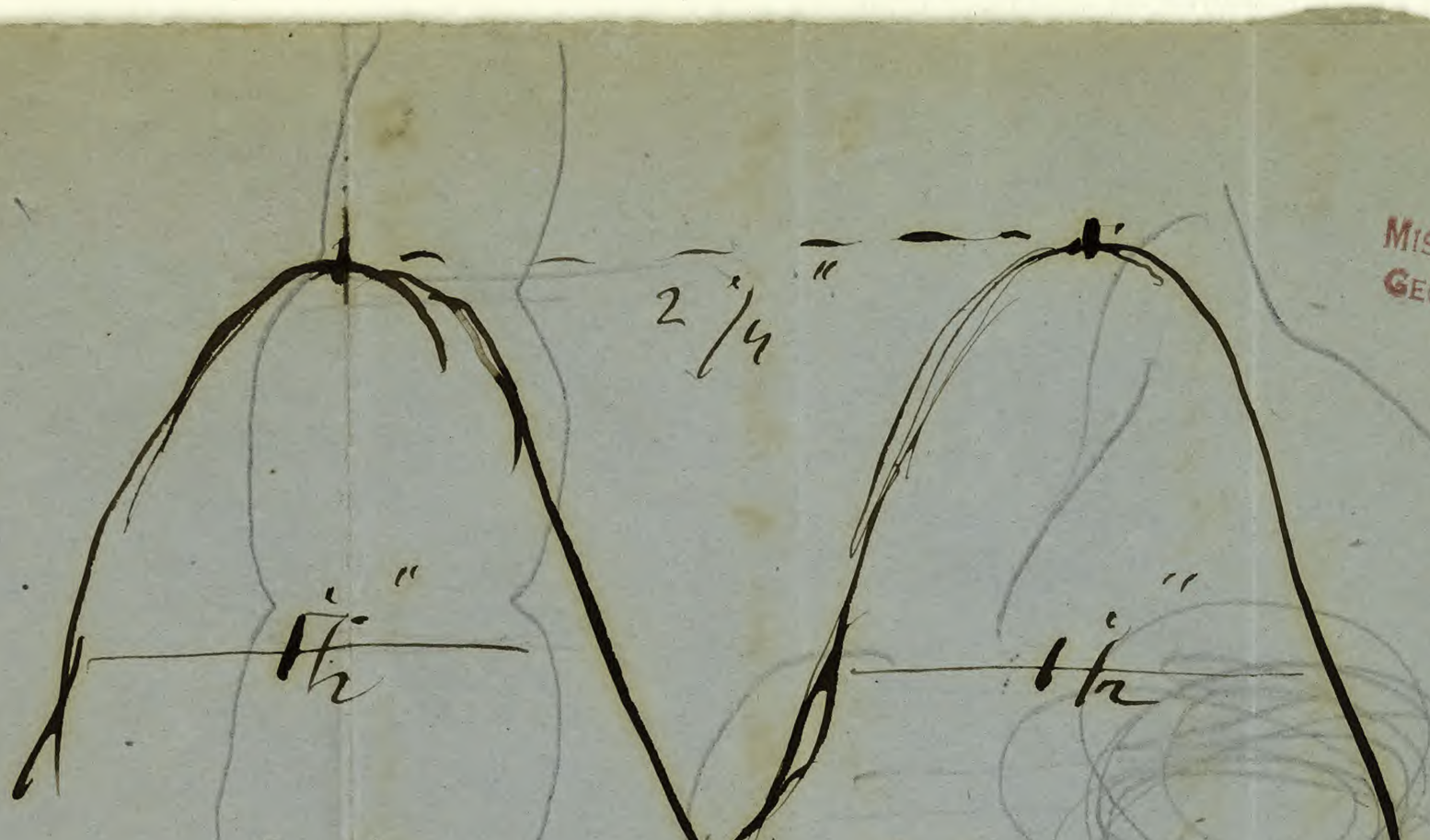

2 ribs of P. gigantea measured by Dr Lamy
diameter 16 inches (including ribs, excluding spines
section one foot below summit
specimen of spring taken near the same
place

Dr Brizelius says stem mostly covered with spines to base
ribs quite shallow below

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March 1856

S. Cor. Thurberi
A. Schott.

2094

Sem. 0.9 long, sometimes 1.0 in longest diameter, oblique obovate, cristate hilum sub basilar, oblong. Test smooth shining, very minutely tuberculate. Albumen, cotyledons curved, foliaceous

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Measurements of a branched Specimen
of Cereus Gigantens. Tornada, between Tucson, & Rio Gila.

Height, 30 ft.
Diameter of base, 1 ft 2 inch.
Circumference 10 ft up, 5 ft 10 inch:
" 20 ft " 4 ft 2 inch.
No of ribs, at base, 12.
" " " , 10 ft up. 18.
" " " , at Summit, 20.
Width of ribs, near base, 4 inch.
" " " , 10 ft up. 3½ inch.
" " " , near Summit, 1½ inch.
Width of interval, at base, 4¼ inch.
" " " , 20 ft up, 3½ inch.
" " " , near Summit, 2¼ inch.
Thickness of External Cellular Tissue, near base, 2¾ inch.
" " Internal " " " , " " . 4 inch.
Thickness of External Cellular Tissue, 12 ft up. 6 inch.
Thickness of Internal Cellular Tissue, near Summit. 3 inch.
Horizontal Thickness of woody fibres, near base, 3¾ inch.
No of branches proceeding 12 ft above base, 3.
Length of branches, (unequal) longest, 5 ft.
No of ribs, at base, of largest branch, 14.
" " " , " Summit, " " , 18.

2095

C C Parry.

What kind of green?

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{ Frontera Texas April 13th 1852

To Major W.m H Emory. Chief Astronomer, Surveyor & Head of Scientific Corps, U.S. Boundary Commission —

2096

Major:

Having been connected with the expedition, lately sent by your orders, to the Pimo Village, on the Rio Gila, I am able to comply, with that part of your instructions, in which you desire me, to procure a detailed description, of the vegetable wonder, first discovered by yourself, in 1846, and characterized by Dr Engelmann. as the Cereus. Giganteus,

As it contains matter of immediate interest. I submit it. thus early to your disposal.

Unfortunately the Earliness of the season, prevented the procuring of flower, or fruit, which are still wanting to the complete description. I have endeavored in part to supply this from information. derived from the inhabitants.

Specimens, collected in illustration of the subjoined characters, consist of portions of the upper & lower ribs, including several bunches of Spines, also detached portions of the central ligneous fibres; these with the accompanying measurements, will be sufficient to enable accurate sections, to be made, exhibiting the very peculiar anatomical structure of this plant.

Respectfully Your Ob.t Serv.t
Chas C Parry
Botanist & Geologist
to U.S. Bound.y Com.n.

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Description —

Cereus, giganteus, Engl. in Emory's Report. —

"Suwarrow" of the Indians. 2097

Axis cylindric; (in young specimens club-shaped: narrowing at base; tapering toward the summit; thickest toward the upper part of the lower third; more or less obscurely marked by transverse furrows, giving a subannulate appearance, the rings 4 to 8 inches in height, corresponding to different periods of growth. — Height of the main column 25. to 60. ft; summit wooly, slightly depressed.

Most frequently branched, the branches proceeding from the upper part of the lower half, and when the main axis acquires its greatest thickness; curving upward below; the upper sub axis corresponding to the direction of the main axis; (i.e.) perpendicular), always of less height than the main columns, and generally of variable heights, compared with each other, most common number 2, & 3; length 5 to 10 ft; corresponding in external character to the upper part of the main axis.

Ribs perpendicular, fewest in number below, (12) increasing above, (18 to 20.) occasionally bifurcating upward, more commonly a new rib, springing up from the interval of other ribs, thence always proceeding to the summit; — Lower ribs, broad, flattened, with shallow intervals, the bunches of Spines, being mostly worn off. Upper ribs sharply rounded, with deep narrow intervals.

Tubercles, slightly swelling on the summit of the ribs, ovate, with round areolae, at their summits, set with short whitish wool, imbedding bunches of Spines.

Spines, regularly accompanying the areolae, and crowning the summit of the ribs, with a Spinal fringe; in young Specimens, 1 inch, apart, consisting of 6 central Spines: (longest) 11 to 17." radiate (shortest)

Lower central spine, largest, 1½ to 2½ inch long, pointing obliquely downward. 2 medium, central spines, pointing on

each side, 3 upper shorter spines, in an horizontal row, pointing upwards, & outwards.- All the central spines, stout, finely sulcate, with a redish sharp point, thickened below, and swelling at their insertion, in the areolae, into a black button shaped base.

Radiate Spines, setiform, of variable length, 1/2 to 3/4 inch. Spines of the lower ribs, generally broken, & worn off. Spines of the upper ribs, all white, setiform, presenting the relative situation, & proportions, of the typical spines.)

Axis, composed of External cellular tissue, 3 to 6 inch, in thickness, enclosing bundles of continuous woody fibres, forming straight columns, corresponding to the intervals of the ribs, the cellular tissue, passing between these bundles, and forming a central pith, 4 to 6 inch in diameter:- The woody columns frequently anastomosing, increasing in thickness towards the base, swelling below into irregular knotted roots, extending horizontally, & set with fine fibrillae.

Specimens in decay, weathering into a bundle of the enclosed woody columns, presenting a shattered appearance. woody columns tough, & elastic, 1/2 to 3 inch in diameter.

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From information-(?)

Flowering period, May, & June, flowers white, with a red center, 3 inch diameter, proceeding from the summit of the main axis & branches — Fruit mature in August, obovate, set with fine spines, 1½ inch diameter, when ripe red, consisting of a thin skin, enclosing sugar, pulp, of which a syrup is made -

Hab. - Rocky crevices, & gravelly table land, from Tucson, north to the Rio Gila - I also learn that it has another geographical range, in Central Sonora, near the heads of Streams, emptying into the Gulf of California. —

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Philippi Flor Atacam. 23 t. 11. A

Eulychnia, Philippi n. gen. Reisende in der
Wüste Atacama, Halle 1860, appendix.
Benth. & Hook gen. plant. I. p. 1008

petala alba vel rosea

926-936

Eulychnia

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Berlin 1869

Eulychnia Phil. n. gen

Reise durch die Wüste Atacama
v. R. A. Philippi; Halle 1860 opp.

Squamae plurimae multiseriales ovarii latera cingentes foliaceae patentes, lana longa densa vestitae. Perigonii supera foliola erecta tubum brevem formantia 4-serialia, seriei duae inferiores viridescentes calycinae, superiores albidae petaloideae. Stamina plurima apici plano ovarii inserta, petalis breviora; filamenta libera, antherae oblongae. Ovarium obconicum infernum unilobulare; placentis parietalibus, multiovulatis. Stylus cylindricus, longitudine staminum; stigma multipartitum, laciniis circa 24 erectis. Fructus ... Frutices ramosi aphylli cylindrici haud articulati, costati, habitu cereos referentes et unice flore distinguendi.

2099

1 Eulychnia breviflora Ph. Octopedalis et supra ramosa; ramis c. 3 poll crassis 12-13 angulatibus verrucis confertis, lana brevi cinerea obtectis, aculeis circa 20 q. l. longis majoribus 2 usque ad 3 lin. 6 poll longis, usque ad 1/3 lin crassis, + aliis crinaeformibus!! Ovarium turbinatum 1/2 poll longum, omnino squamis patentibus

caulos. 1½ lin. longis dense pilosis cinctum, pilis crispis 4-q lin. longis fulvis; squam. oblongæ virides apice nigræ; ser. inferior pilis rectis nigris appressis cincta; Corolla aperta minime tubulosa; petala a sepalis bene distincta q lin. longa oblongo-lanceolata lactea vel alba in roseum vergentia. Staminum numerosissima dimidio petala æquantia; styl. stam. æq. stigmate c. 24 erecto. Cæsp. ovar. 5 lin. diam. 2 lin. alt.

Coquimbo, Paposo etc

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tab.

squama ovar.

sect.

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